

WHAT IS CLAIMED IS:

1. An image forming apparatus comprising:
  - an image bearing member;
  - a charging portion for applying a first
  - 5 charging voltage of a predetermined polarity to a charging member to thereby charge said image bearing member to predetermined potential at a charging position;
  - an exposing portion for exposing said image
  - 10 bearing member to light to thereby form an electrostatic latent image on said image bearing member;
  - a developing portion for developing the electrostatic latent image on said image bearing
  - 15 member with a toner to thereby form a toner image;
  - a transferring portion for applying a first transfer voltage of a polarity opposite to said predetermined polarity to a transferring member to thereby transfer said toner image on said image
  - 20 bearing member to a recording material at a transferring position; and
  - a controlling portion for controlling the charging voltage applied to said charging member by said charging portion and the transfer voltage
  - 25 applied to said transferring member by said transferring portion,
  - wherein said controlling portion changes said

first transfer voltage to a second transfer voltage before a trailing edge of said recording material arrives at said transferring position, changes it to a third transfer voltage after the trailing edge of  
5 said recording material has passed said transferring position, and changes said first charging voltage to a second charging voltage smaller than said first charging voltage when an area on said image bearing member to which said second transfer voltage has been  
10 applied passes said charging position, and a difference between said second transfer voltage and said third transfer voltage is smaller than a difference between said second transfer voltage and said first transfer voltage.

15

2. An image forming apparatus according to Claim 1, wherein said first charging voltage and said second charging voltage applied to said charging member by said charging portion are DC voltages.

20

3. An image forming apparatus according to Claim 1, wherein said second transfer voltage is a voltage when said transferring portion does not apply a transfer voltage to said transferring member.

25

4. An image forming apparatus according to Claim 1, wherein said second transfer voltage is a

voltage of said predetermined polarity.

5. An image forming apparatus according to Claim 4, wherein said controlling portion stops the  
5 application of said second transfer voltage in accordance with the trailing edge of said recording material having passed said transferring position, and changes said first transfer voltage to said third transfer voltage after it has stopped the application  
10 of said second transfer voltage.

6. An image forming apparatus according to Claim 5, wherein said controlling portion changes said first charging voltage to the second charging  
15 voltage smaller than said first charging voltage when the area on said image bearing member to which said second transfer voltage has been applied passes said charging position, and charges said first charging voltage to a third charging voltage smaller than said  
20 first charging voltage and greater than said second charging voltage when an area on said image bearing member to which said transfer voltage has not been applied passes said charging position.

25 7. An image forming apparatus comprising:  
an image bearing member;  
a charging portion for charging said image

bearing member to predetermined potential;

an exposing portion for exposing said image bearing member to light to thereby form an electrostatic latent image on said image bearing member;

a developing portion for applying a first developing voltage of a predetermined polarity to a developing member to thereby develop the electrostatic latent image on said image bearing member with a toner at a developing position and forming a toner image;

a transferring portion for applying a first transfer voltage of a polarity opposite to said predetermined polarity to a transferring member to thereby transfer said toner image on said image bearing member to a recording material at a transferring position; and

a controlling portion for controlling a charging voltage applied to a charging member by said charging portion and the transfer voltage applied to said transferring member by said transferring portion,

wherein said controlling portion changes said first transfer voltage to a second transfer voltage before a trailing edge of said recording material arrives at said transferring position, changes it to a third transfer voltage after the trailing edge of said recording material has passed said transferring

position, and changes said first developing voltage to a second developing voltage greater than said first developing voltage when an area on said image bearing member to which said second transfer voltage  
5 has been applied passes said developing position, and a difference between said second transfer voltage and said third transfer voltage is smaller than a difference between said second transfer voltage and said first transfer voltage.

10

8. An image forming apparatus according to Claim 7, wherein said first developing voltage and said second developing voltage applied to said developing member by said developing portion are DC  
15 voltages.

9. An image forming apparatus according to Claim 7, wherein said second transfer voltage is a voltage when said transferring portion does not apply  
20 a transfer voltage to said transferring member.

10. An image forming apparatus according to Claim 7, wherein said second transfer voltage is a voltage of said predetermined polarity.

25

11. An image forming apparatus according to Claim 10, wherein said controlling portion stops the

application of said second transfer voltage in  
accordance with the trailing edge of said recording  
material having passed said transferring position,  
and changes said first transfer voltage to said third  
5 voltage after it has stopped the application of said  
second transfer voltage.

12. An image forming apparatus according to  
Claim 11, wherein said controlling portion changes  
10 said first developing voltage to a second developing  
voltage greater than said first developing voltage  
when the area on said image bearing member to which  
said second transfer voltage has been applied passes  
said developing position, and changes said first  
15 developing voltage to a third developing voltage  
greater than said first developing voltage and  
smaller than said second developing voltage when an  
area on said image bearing member to which said  
transfer voltage has not been applied passes said  
20 developing position.